

**Senate File 116 - Introduced**

SENATE FILE 116

BY DONAHUE

**A BILL FOR**

1 An Act relating to certain specified skilled trades, including  
2 modifying provisions related to economic development  
3 authority internship programs, the Iowa summer youth corps  
4 program, college student aid commission programs, the senior  
5 year plus program, the science, technology, engineering,  
6 and mathematics collaborative initiative established at  
7 the university of northern Iowa, and curricula provided  
8 in school districts, accredited nonpublic schools, and  
9 charter schools to include the skilled trades, and including  
10 applicability provisions.

11 BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF IOWA:

1 Section 1. Section 15.411, subsection 3, paragraph c,  
2 subparagraph (1), Code 2023, is amended to read as follows:

3 (1) The purpose of the second component of the program is to  
4 assist in placing Iowa students studying in the skilled trades,  
5 including trades related to welding, machinist technology,  
6 tool and die making, carpentry, electrical work, plumbing,  
7 automotive mechanics technology, and heating, ventilation,  
8 and air conditioning technology, or in the fields of science,  
9 technology, engineering, and mathematics into internships  
10 that lead to permanent positions with Iowa employers. The  
11 authority shall collaborate with eligible employers, including  
12 but not limited to innovative businesses, to ensure that the  
13 interns hired are studying in such fields. An Iowa employer  
14 may receive financial assistance on a matching basis for a  
15 portion of the wages paid to an intern. If providing financial  
16 assistance, the authority shall provide the assistance on a  
17 reimbursement basis such that for every two dollars of wages  
18 earned by the student, one dollar paid by the employer is  
19 matched by one dollar from the authority. The amount of  
20 financial assistance shall not exceed five thousand dollars per  
21 internship. The authority may adopt rules to administer this  
22 component. In adopting rules to administer this component, the  
23 authority shall adopt rules as similar as possible to those  
24 adopted pursuant to paragraph "b".

25 Sec. 2. Section 15H.5, subsection 3, Code 2023, is amended  
26 to read as follows:

27 3. The program shall provide grants for projects that  
28 utilize a service-learning approach during the summer months  
29 to enhance student achievement and summer learning retention,  
30 teach meaningful job skills to Iowa youth, engage Iowa youth  
31 in their communities, provide positive youth development  
32 experiences, and address the needs of youth from families with  
33 low income. The service-learning approach shall be integrated  
34 into the program using curricula related to the skilled trades,  
35 including trades related to welding, machinist technology,

1 tool and die making, carpentry, electrical work, plumbing,  
2 automotive mechanics technology, and heating, ventilation,  
3 and air conditioning technology, science, technology,  
4 engineering, mathematics, social studies, civic literacy, or  
5 other appropriate curricula identified by the department of  
6 education.

7 Sec. 3. Section 256.11, subsection 5, paragraph h,  
8 subparagraph (1), subparagraph division (c), Code 2023, is  
9 amended to read as follows:

10 (c) Applied sciences, technology, engineering, and  
11 manufacturing, including transportation, distribution,  
12 logistics, architecture, ~~and construction,~~ and curricula  
13 related to the skilled trades, including trades related to  
14 welding, machinist technology, tool and die making, carpentry,  
15 electrical work, plumbing, automotive mechanics technology, and  
16 heating, ventilation, and air conditioning technology.

17 Sec. 4. Section 256.40, subsection 2, paragraph d, Code  
18 2023, is amended to read as follows:

19 *d.* Provide a one-stop contact point for information  
20 useful to both educators and employers, including information  
21 on internships, job shadowing experiences, apprenticeable  
22 occupations as defined in [section 15B.2](#), and other workplace  
23 learning opportunities for students, particularly related to  
24 science, technology, engineering, or mathematics occupations,  
25 occupations related to critical infrastructure and commercial  
26 and residential construction, the skilled trades, including  
27 trades related to welding, machinist technology, tool and  
28 die making, carpentry, electrical work, plumbing, automotive  
29 mechanics technology, and heating, ventilation, and air  
30 conditioning technology, or targeted industries as defined in  
31 section 15.102.

32 Sec. 5. Section 261.86, subsection 6, paragraph b, Code  
33 2023, is amended to read as follows:

34 *b.* The adjutant general shall submit a report to the  
35 governor and the general assembly by December 31 of each

1 year listing the science, technology, engineering, and  
2 mathematics-related career fields, and the career fields  
3 related to the skilled trades, including trades related to  
4 welding, machinist technology, tool and die making, carpentry,  
5 electrical work, plumbing, automotive mechanics technology, and  
6 heating, ventilation, and air conditioning technology, that the  
7 adjutant general plans to focus on in providing educational  
8 incentives under [this section](#) and [section 261.86A](#) using funds  
9 available under [this subsection](#) for that fiscal year.

10 Sec. 6. Section 261.86A, subsection 1, paragraph a, Code  
11 2023, is amended to read as follows:

12 a. The adjutant general has the authority under this  
13 section to authorize the expenditure of unencumbered or  
14 unobligated funds as described in section 261.86, subsection  
15 6, to recruit or retain individuals who have completed or  
16 are pursuing training in science, technology, engineering,  
17 and mathematics-related military occupational specialties,  
18 occupational specialties related to the skilled trades,  
19 including trades related to welding, machinist technology,  
20 tool and die making, carpentry, electrical work, plumbing,  
21 automotive mechanics technology, and heating, ventilation, and  
22 air conditioning technology, or air force specialty codes by  
23 issuing awards through a national guard student loan repayment  
24 program in accordance with [subsection 2](#) or by providing a  
25 scholarship award to an eligible member of the national guard  
26 who is enrolled at an institution defined in section 261.86,  
27 subsection 1, paragraph "d", in a master's degree program  
28 that is in compliance with the federal Edith Nourse Rogers  
29 STEM scholarship program established under 38 U.S.C. §3320 in  
30 accordance with the requirements of [subsection 3](#).

31 Sec. 7. Section 261.110, subsection 3, paragraph b, Code  
32 2023, is amended to read as follows:

33 b. The applicant is preparing to teach in fields including  
34 but not limited to science, technology, engineering, or  
35 mathematics; English as a second language or special education

1 instruction; the skilled trades, including trades related  
2 to welding, machinist technology, tool and die making,  
3 carpentry, electrical work, plumbing, automotive mechanics  
4 technology, and heating, ventilation, and air conditioning  
5 technology; or is preparing to teach in a hard-to-staff subject  
6 as identified by the department. The department shall take  
7 into account the varying regional needs in the state for  
8 teachers in these subject areas when applying the criterion  
9 of this paragraph. The department shall annually identify  
10 and designate hard-to-staff subjects for the purpose of this  
11 paragraph. The eligibility of an applicant who receives a  
12 teach Iowa scholar grant and who is preparing to teach in a  
13 hard-to-staff subject as identified by the department shall  
14 not be affected in subsequent years if the department does not  
15 continue to identify that subject as a hard-to-staff subject.

16 Sec. 8. Section 261E.3, subsection 3, paragraph j, Code  
17 2023, is amended to read as follows:

18 *j.* All eligible postsecondary institutions providing  
19 programming under [this chapter](#) shall include the unique student  
20 identifier assigned to students while in the kindergarten  
21 through grade twelve system as a part of the institution's  
22 student data management system. Eligible postsecondary  
23 institutions providing programming under [this chapter](#) shall  
24 cooperate with the department on data requests related to  
25 the programming. All eligible postsecondary institutions  
26 providing programming under [this chapter](#) shall collect data  
27 and report to the department on the proportion of females and  
28 minorities enrolled in educational opportunities related to the  
29 skilled trades, including trades related to welding, machinist  
30 technology, tool and die making, carpentry, electrical work,  
31 plumbing, automotive mechanics technology, and heating,  
32 ventilation, and air conditioning technology, or in science,  
33 technology, engineering, and mathematics-oriented educational  
34 opportunities provided in accordance with [this chapter](#).  
35 The department shall submit the programming data and the

1 department's findings and recommendations in a report to the  
2 general assembly annually by January 15.

3 Sec. 9. Section 268.7, Code 2023, is amended to read as  
4 follows:

5 **268.7 Science, technology, engineering, and mathematics**  
6 **collaborative initiative.**

7 1. A science, technology, engineering, and mathematics  
8 collaborative initiative is established at the university of  
9 northern Iowa for purposes of supporting activities directly  
10 related to recruitment of prekindergarten through grade twelve  
11 mathematics and science teachers for ongoing mathematics and  
12 science programming for students enrolled in prekindergarten  
13 through grade twelve and for the recruitment of grade one  
14 through grade twelve teachers for ongoing programming related  
15 to the skilled trades, including trades related to welding,  
16 machinist technology, tool and die making, carpentry,  
17 electrical work, plumbing, automotive mechanics technology, and  
18 heating, ventilation, and air conditioning technology.

19 2. The collaborative initiative shall prioritize student  
20 interest in achievement in science, technology, engineering,  
21 and mathematics and the skilled trades, including trades  
22 related to welding, machinist technology, tool and die making,  
23 carpentry, electrical work, plumbing, automotive mechanics  
24 technology, and heating, ventilation, and air conditioning  
25 technology; reach every student and teacher in every school  
26 district in the state; identify, recruit, prepare, and support  
27 the best mathematics, and science, and skilled trades teachers;  
28 and sustain exemplary programs through the university's Iowa  
29 mathematics and science education partnership. The university  
30 shall collaborate with the community colleges to develop  
31 skilled trades and science, technology, engineering, and  
32 mathematics professional development programs for community  
33 college instructors and for purposes of skilled trades and  
34 science, technology, engineering, and mathematics curricula  
35 development.

1     3. Subject to an appropriation of funds by the general  
2 assembly, the initiative shall administer the following:  
3     a. Regional science, technology, engineering, and  
4 mathematics networks for Iowa, the purpose of which is to  
5 equalize science, technology, engineering, and mathematics  
6 education enrichment opportunities, and enrichment  
7 opportunities related to the skilled trades, including trades  
8 related to welding, machinist technology, tool and die making,  
9 carpentry, electrical work, plumbing, automotive mechanics  
10 technology, and heating, ventilation, and air conditioning  
11 technology, that are available to learners statewide. The  
12 initiative shall establish six geographically similar regional  
13 science, technology, engineering, and mathematics networks  
14 across Iowa that complement and leverage existing resources,  
15 including but not limited to extension service assets,  
16 area education agencies, state accredited postsecondary  
17 institutions, informal educational centers, school districts,  
18 economic development zones, and existing public and private  
19 science, technology, engineering, and mathematics partnerships.  
20 Each network shall be managed by a highly qualified science,  
21 technology, engineering, and mathematics and skilled trades  
22 advocate positioned at a network hub to be determined through a  
23 competitive application process. Oversight for each regional  
24 network shall be provided by a regional advisory board.  
25 Members of the board shall be appointed by the governor. The  
26 membership shall represent prekindergarten through grade twelve  
27 school districts and schools, and higher education, business,  
28 nonprofit organizations, youth agencies, and other appropriate  
29 stakeholders.  
30     b. A focused array of the best skilled trades and  
31 science, technology, engineering, and mathematics enrichment  
32 opportunities, selected through a competitive application  
33 process, that can be expanded to meet future needs. A limited,  
34 focused list of selected exemplary programs shall be made  
35 available to each regional network.

1     c.   Statewide skilled trades and science, technology,  
2 engineering, and mathematics programming designed to increase  
3 participation of students and teachers in successful learning  
4 experiences; to increase the number of science, technology,  
5 engineering, and mathematics-related teaching majors offered  
6 by the state's universities; to increase the number of skilled  
7 trades programs offered by the state accredited postsecondary  
8 institutions; to elevate public awareness of the opportunities;  
9 and to increase collaboration and partnerships.

10     4.   The initiative shall evaluate the effectiveness of  
11 programming to document best practices.

12     Sec. 10.   STEM ADVISORY COUNCIL.   The science, technology,  
13 engineering, and math advisory council, created by the governor  
14 of this state by executive order on July 26, 2011, and modified  
15 by executive order on May 15, 2013, shall do all of the  
16 following:

17     1.   Using existing funding and programmatic support, provide  
18 opportunities for students enrolled in kindergarten through  
19 grade twelve to experience science, technology, engineering,  
20 and mathematics through the skilled trades, including trades  
21 related to welding, machinist technology, tool and die making,  
22 carpentry, electrical work, plumbing, automotive mechanics  
23 technology, and heating, ventilation, and air conditioning  
24 technology.

25     2.   Authorize teachers participating in externship programs  
26 facilitated by the council to participate in externship  
27 programs related to the skilled trades, including trades  
28 related to welding, machinist technology, tool and die making,  
29 carpentry, electrical work, plumbing, automotive mechanics  
30 technology, and heating, ventilation, and air conditioning  
31 technology.

32     3.   Include and highlight the skilled trades, including  
33 trades related to welding, machinist technology, tool and  
34 die making, carpentry, electrical work, plumbing, automotive  
35 mechanics technology, and heating, ventilation, and air

1 conditioning technology, as part of the council's efforts  
2 to promote educational opportunities related to science,  
3 technology, engineering, and math within this state's education  
4 system and workforce.

5 Sec. 11. APPLICABILITY. The following apply to  
6 applications submitted to the college student aid commission on  
7 or after the effective date of this Act:

- 8 1. The section of this Act amending section 261.86A.
- 9 2. The section of this Act amending section 261.110.

10 EXPLANATION

11 The inclusion of this explanation does not constitute agreement with  
12 the explanation's substance by the members of the general assembly.

13 This bill relates to certain specified skilled trades,  
14 including modifying provisions related to economic development  
15 authority internship programs, the Iowa summer youth corps  
16 program, college student aid commission (CSAC) programs, the  
17 senior year plus program, the science, technology, engineering,  
18 and mathematics (STEM collaborative initiative) established  
19 at the university of northern Iowa, and curricula provided in  
20 school districts, accredited nonpublic schools, and charter  
21 schools to include skilled trades.

22 Current law requires the economic development authority  
23 to establish an internship program that assists in placing  
24 Iowa students studying in the fields of science, technology,  
25 engineering, and mathematics into internships that lead to  
26 permanent positions with Iowa employers. The bill provides  
27 that this program shall also assist in placing Iowa students  
28 studying skilled trades, including trades related to welding,  
29 machinist technology, tool and die making, carpentry,  
30 electrical work, plumbing, automotive mechanics technology, and  
31 heating, ventilation, and air conditioning technology (skilled  
32 trades) into internships that lead to permanent positions with  
33 Iowa employers.

34 Current law establishes the Iowa youth summer corps program  
35 within the Iowa commission on volunteer services. The program

1 provides grants for projects that utilize a service-learning  
2 approach during the summer months to enhance student  
3 achievement and summer learning retention, teach meaningful job  
4 skills to Iowa youth, engage Iowa youth in their communities,  
5 provide positive youth development experiences, and address  
6 the needs of youth from families with low income. Under the  
7 program, the service-learning approach is to be integrated  
8 into the program using science, technology, engineering,  
9 mathematics, social studies, civic literacy, or other  
10 appropriate curricula identified by the department of education  
11 (DE). The bill establishes that the service-learning approach  
12 may also be integrated into the program using curricula related  
13 to the skilled trades.

14 Current law requires that students enrolled in school  
15 districts and charter schools in grades 9 through 12 receive  
16 instruction in certain career and technical education service  
17 areas, including applied sciences, technology, engineering,  
18 manufacturing, transportation, distribution, logistics,  
19 architecture, and construction. The bill provides that such  
20 instruction also include curricula related to the skilled  
21 trades. Current law also establishes that these career and  
22 technical education service areas be incorporated into the  
23 career exploration and development curriculum provided to  
24 students enrolled in school districts, accredited nonpublic  
25 schools, and charter schools in grades seven and eight.

26 Current law establishes a statewide work-based learning  
27 intermediary network program within the DE. Among other  
28 duties, the program is required to provide a one-stop contact  
29 point for information useful to both educators and employers  
30 related to certain specified occupations. The bill provides  
31 that the program is required to provide a one-stop contact  
32 point for information useful to both educators and employers  
33 related to the skilled trades.

34 Current law establishes the national guard service  
35 scholarship program within the CSAC. The program provides

1 annual awards to Iowa national guard members who attend  
2 eligible Iowa colleges and universities. The bill requires  
3 the adjutant general to submit a report to the governor and  
4 the general assembly listing the career fields related to the  
5 skilled trades that the adjutant general plans to focus on in  
6 providing educational incentives under the program and under  
7 the national guard STEM-related recruitment and retention  
8 incentive program. The bill establishes that the adjutant  
9 general may authorize the expenditure of unencumbered or  
10 unobligated funds under the national guard service scholarship  
11 program to recruit or retain individuals who have completed or  
12 are pursuing training in occupational specialties related to  
13 the skilled trades. This provision applies to applications  
14 submitted to the CSAC on or after the effective date of the  
15 bill.

16 Current law establishes the teach Iowa scholar program  
17 within the CSAC. The program provides qualified Iowa teachers  
18 with awards for teaching in Iowa schools in designated shortage  
19 areas. The bill establishes that criteria under the program  
20 include that an applicant be preparing to teach in fields  
21 relating to the skilled trades. This provision applies to  
22 applications submitted to the CSAC on or after the effective  
23 date of the bill.

24 The bill requires all eligible postsecondary institutions  
25 providing programming under the senior year plus program to  
26 collect data and report to DE on the proportion of females and  
27 minorities enrolled in educational opportunities related to the  
28 skilled trades.

29 Current law establishes the STEM collaborative initiative  
30 at the university of northern Iowa. The purpose of the STEM  
31 collaborative initiative is to support activities related to  
32 recruitment of mathematics and science teachers for ongoing  
33 mathematics and science programming. The bill establishes  
34 that another purpose of the STEM collaborative initiative is  
35 to support activities related to the recruitment of teachers

1 for ongoing programming related to the skilled trades. The  
2 bill requires the STEM collaborative initiative to, among  
3 other duties, prioritize student interest in achievement in  
4 the skilled trades and identify, recruit, prepare, and support  
5 the best skilled trades teachers. The bill also requires the  
6 university of northern Iowa to collaborate with community  
7 colleges to develop skilled trades professional development  
8 programs for community college instructors and to develop  
9 skilled trades curricula. Additionally, the bill requires the  
10 STEM collaborative initiative to administer regional networks  
11 for Iowa to provide enrichment opportunities related to the  
12 skilled trades, a focused array of the best skilled trades  
13 enrichment opportunities that can be expanded to meet future  
14 needs, and statewide skilled trades programming.

15 The bill requires the science, technology, engineering, and  
16 math advisory council (STEM council) created by the governor by  
17 executive order to take certain actions, including use existing  
18 funding and programmatic support to provide opportunities  
19 for students enrolled in kindergarten through grade 12 to  
20 experience science, technology, engineering, and mathematics  
21 through the skilled trades, authorize teachers participating  
22 in externship programs facilitated by the STEM council to  
23 participate in externship programs related to the skilled  
24 trades, and include and highlight the skilled trades as part of  
25 the STEM council's efforts to promote educational opportunities  
26 related to science, technology, engineering, and math within  
27 this state's education system and workforce.